FEDERAL SUPPLY CLASS
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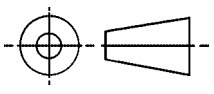
THIRD ANGLE PROJECTION



ISSUED 2000-03

PREPARED BY SAE SUBCOMMITTEE AE-8C2

SAE The Engineering Society For Advancing Mobility Land Sea Air and Space®
INTERNATIONAL
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# AEROSPACE STANDARD

TERMINAL JUNCTION SYSTEM, RACK ASSEMBLY, TRACK, FEEDTHRU TYPE, LIGHT WEIGHT, SERIES I

**AS81714/14**
SHEET 1 OF 7



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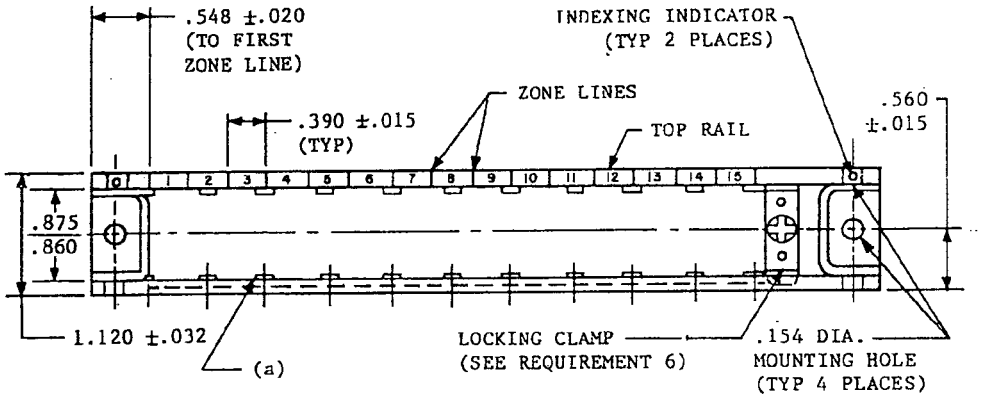
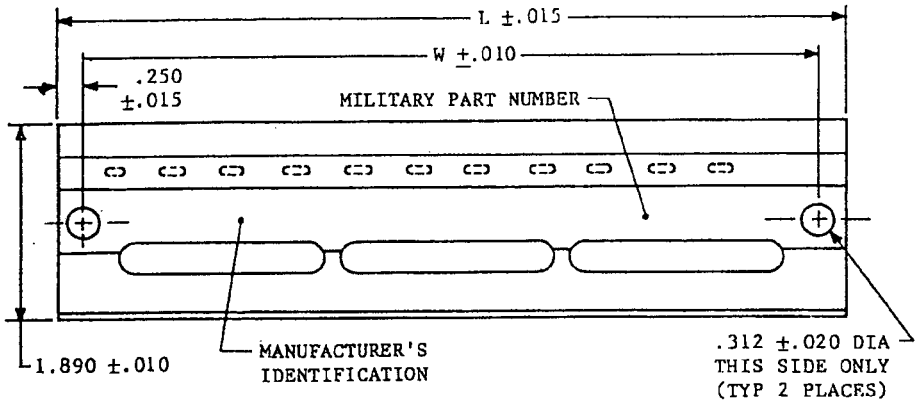
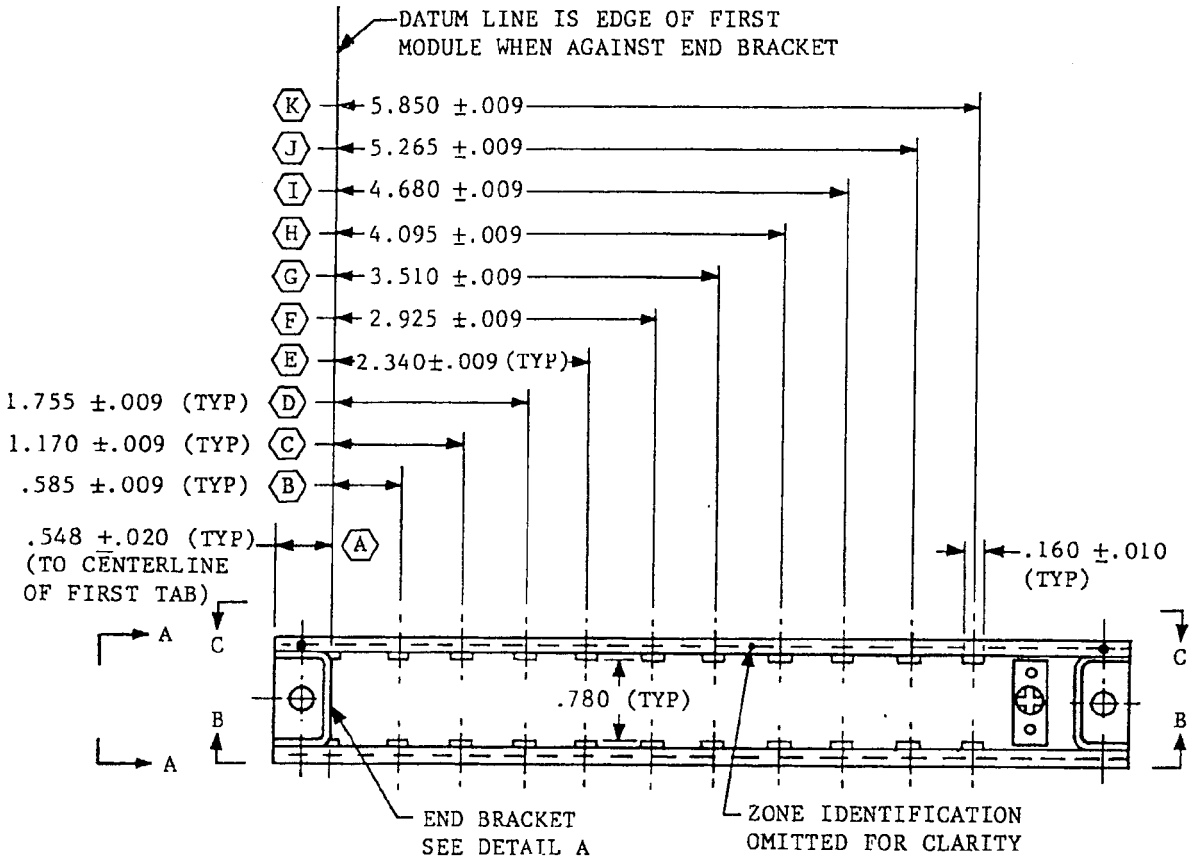
THE COMPLETE REQUIREMENTS FOR ACQUIRING THE RACK DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF SPECIFICATION MIL-T-81714.

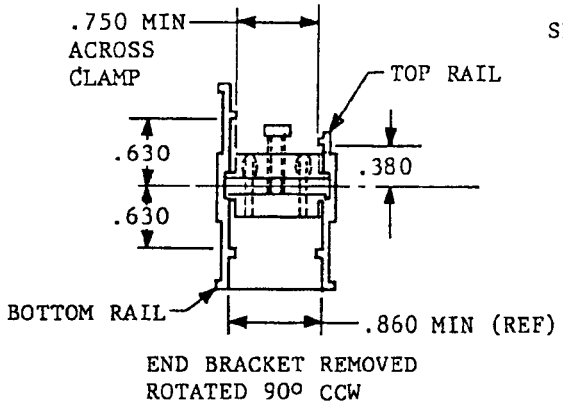


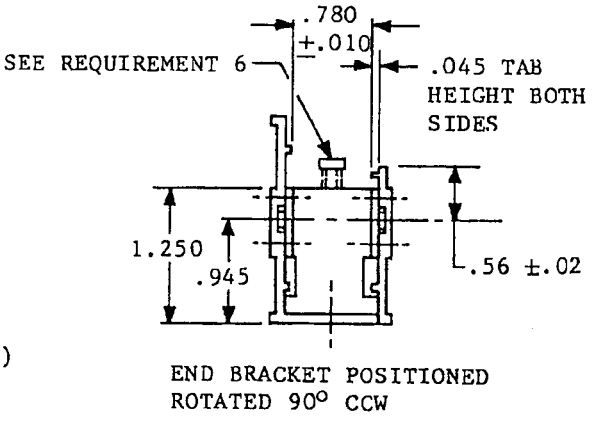




VIEW B-B

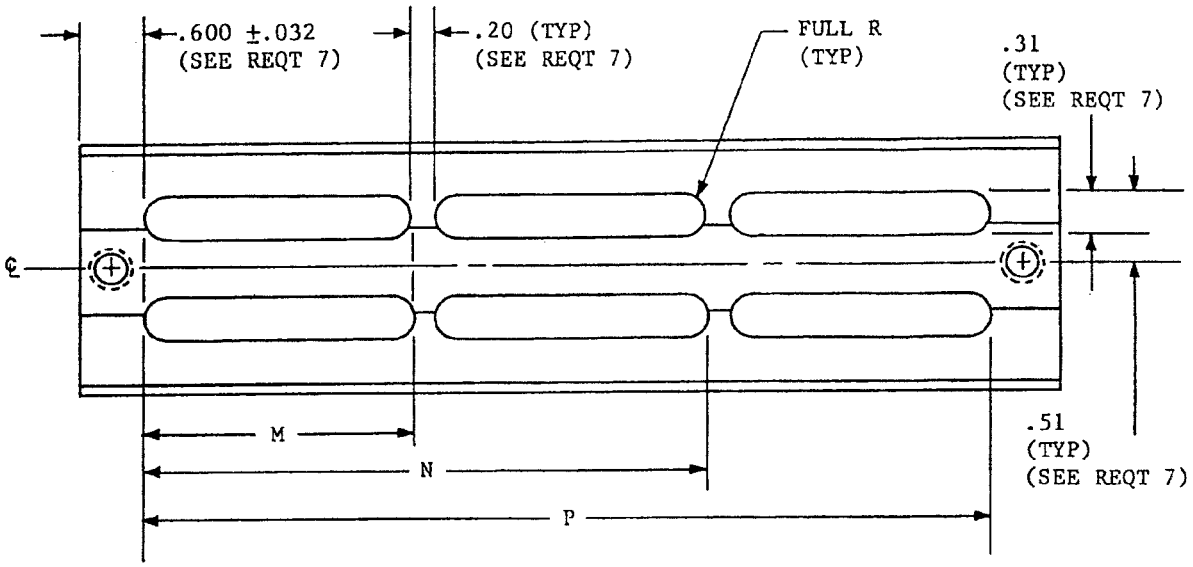
(a) CHANGE IN TAB DESIGN FROM TAPERED TO RECTANGULAR, EFFECTIVE NO LATER THAN 1 YEAR FROM DATE OF REVISION A.


DATUM LINE IS EDGE OF FIRST MODULE WHEN AGAINST END BRACKET
K
5.850 ±.009
J
5.265 ±.009
I
4.680 ±.009
H
4.095 ±.009
G
3.510 ±.009
F
2.925 ±.009
E
2.340±.009 (TYP)
1.755 ±.009 (TYP)
D
1.170 ±.009 (TYP)
C
.585 ±.009 (TYP)
B
.548 ±.020 (TYP)
(TO CENTERLINE OF FIRST TAB)
A
.160 ±.010 (TYP)
.780 (TYP)
END BRACKET SEE DETAIL A
ZONE IDENTIFICATION OMITTED FOR CLARITY

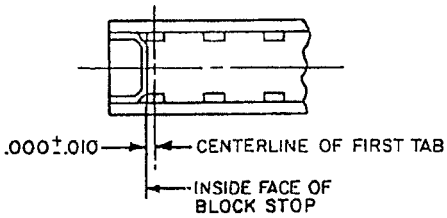

.750 MIN ACROSS CLAMP
TOP RAIL
.630
.630
.380
BOTTOM RAIL
.860 MIN (REF)
END BRACKET REMOVED ROTATED 90° CCW


.780 +.010
SEE REQUIREMENT 6
.045 TAB HEIGHT BOTH SIDES
1.250
.945
.56 ±.02
END BRACKET POSITIONED ROTATED 90° CCW

VIEW A-A




VIEW C-C




DETAIL A

TABLE I

| Dash Number | Number 1/ of Blocks | L | W | M ± .02 | N ±.02 | P ±.02 | Dimple Location |
|---|---|---|---|---|---|---|---|
| 1 | 10 | 5.551 | 5.051 | 2.08 | 4.35 | - | (A) thru (G) |
| 2 | 3 | 2.821 | 2.321 | 1.62 | - | - | (A) thru (C) |
| 3 | 4 | 3.211 | 2.711 | 2.01 | - | - | (A) thru (C) |
| 4 | 5 | 3.601 | 3.101 | 2.40 | - | - | (A) thru (D) |
| 5 | 6 | 3.991 | 3.491 | 1.30 | 2.79 | - | (A) thru (E) |
| 6 | 7 | 4.381 | 3.881 | 1.49 | 3.18 | - | (A) thru (E) |
| 7 | 8 | 4.771 | 4.271 | 1.69 | 3.57 | - | (A) thru (F) |
| 8 | 9 | 5.161 | 4.661 | 1.88 | 3.96 | - | (A) thru (G) |
| 9 | 11 | 5.941 | 5.441 | 2.27 | 4.74 | - | (A) thru (H) |
| 10 | 12 | 6.331 | 5.831 | 2.47 | 5.13 | - | (A) thru (I) |
| 11 | 13 | 6.721 | 6.221 | 1.71 | 3.61 | 5.52 | (A) thru (I) |
| 12 | 14 | 7.111 | 6.611 | 1.84 | 3.86 | 5.90 | (A) thru (J) |
| 13 | 15 | 7.501 | 7.001 | 1.97 | 4.14 | 6.30 | (A) thru (K) |

NOTE:

1/ Number of blocks apply to the 22, 20 and 16 sizes. The number of size 12 blocks is the number shown divisible by 3.

| Inch | mm | Inch | mm | Inch | mm | Inch | mm |
|---|---|---|---|---|---|---|---|
| .005 | 0.13 | .875 | 22.23 | 2.711 | 68.86 | 4.680 | 118.87 |
| .009 | 0.23 | .945 | 24.00 | 2.79 | 70.87 | 4.74 | 120.40 |
| .010 | 0.25 | 1.120 | 28.45 | 2.821 | 71.65 | 4.77 | 121.16 |
| .015 | 0.38 | 1.170 | 29.72 | 2.925 | 74.30 | 5.051 | 128.30 |
| .020 | 0.51 | 1.250 | 31.75 | 3.101 | 78.77 | 5.13 | 130.30 |
| .032 | 0.81 | 1.30 | 33.02 | 3.18 | 80.77 | 5.161 | 131.09 |
| .045 | 1.14 | 1.49 | 37.85 | 3.211 | 81.60 | 5.265 | 133.73 |
| .160 | 4.06 | 1.62 | 41.15 | 3.491 | 88.67 | 5.441 | 138.20 |
| .161 | 4.09 | 1.69 | 42.93 | 3.510 | 89.15 | 5.52 | 140.21 |
| .250 | 6.35 | 1.71 | 43.43 | 3.57 | 90.68 | 5.551 | 141.00 |
| .307 | 7.80 | 1.755 | 44.58 | 3.601 | 91.47 | 5.831 | 148.11 |
| .31 | 7.87 | 1.84 | 46.78 | 3.61 | 91.69 | 5.850 | 148.59 |
| .312 | 7.92 | 1.88 | 47.75 | 3.86 | 98.04 | 5.90 | 149.86 |
| .380 | 9.65 | 1.890 | 48.01 | 3.881 | 98.58 | 5.941 | 150.90 |
| .390 | 9.91 | 1.97 | 50.04 | 3.96 | 100.58 | 6.221 | 158.01 |
| .51 | 12.95 | 2.01 | 51.05 | 3.991 | 101.37 | 6.30 | 160.02 |
| .548 | 13.92 | 2.08 | 52.83 | 4.095 | 104.01 | 6.331 | 160.81 |
| .585 | 14.22 | 2.27 | 57.66 | 4.14 | 105.16 | 6.611 | 167.92 |
| .560 | 14.86 | 2.321 | 58.95 | 4.271 | 108.48 | 6.721 | 170.71 |
| .600 | 15.24 | 2.340 | 59.44 | 4.35 | 110.49 | 7.001 | 177.83 |
| .630 | 16.00 | 2.40 | 60.96 | 4.381 | 111.28 | 7.111 | 180.62 |
| .750 | 19.05 | 2.47 | 62.74 | 4.661 | 118.39 | 7.501 | 190.53 |
| .860 | 21.84 | | | | | | |

REQUIREMENTS:

1. MATERIALS:

   RACK, END BRACKET AND LOCKING CLAMP; ALUMINUM ALLOY 6063, TEMPER T5 IN ACCORDANCE WITH QQ-A-200/9 OR STAINLESS STEEL IN ACCORDANCE WITH QQ-S-766.

2. FINISH:

   ALUMINUM PARTS SHALL BE ANODIC COATED IN ACCORDANCE WITH MIL-A-8625, TYPE II, CLASS 2, BLACK. STAINLESS STEEL PARTS SHALL BE PASSIVATED IN ACCORDANCE WITH QQ-P-35.

3. THE INDEXING INDICATOR SHALL BE MARKED ON THE SPECIFIED TOP RAIL ONLY.

4. THE RACK SHALL BE DESIGNED FOR INSTALLATION OF MIL-T-81714/6, MIL-T-81714/7, MIL-T-81714/8 AND MIL-T-81714/9 BLOCKS.

5. THE RACK SHALL BE DESIGNED SO THAT THE ZONE NUMBERS ON THE BOTTOM RAIL ARE A REVERSE IMAGE OF THOSE SHOWN ON THE SPECIFIED TOP RAIL.

6. LOCKING CLAMP SHALL BE DESIGNED TO BE PERMANENTLY RETAINED IN RACK. THE LOCKING CLAMP SCREW SHALL BE CROSS RECESSED IN ACCORDANCE WITH MS9006, 8-32UNC-2A x .500, CORROSION-RESISTANT STEEL, PASSIVATED, SELF-LOCKING OR EQUIVALENT.

7. THESE DIMENSIONS ARE TYPICAL OF EACH SIDE OF THE RAIL ASSEMBLY.

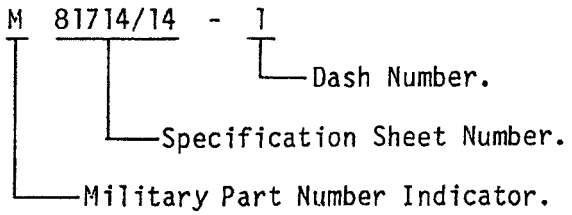
8. RACKS ARE TO BE FREE OF ALL BURRS AND SHARP EDGES .015 MAX.

9. ZONE NUMBERS AND ZONE LINES SHALL BE WHITE.

NOTES:

1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN INCHES, TOLERANCES: DECIMALS ±.005.

2. PART NUMBER: THE PART NUMBER CONSISTS OF THE LETTER M, SPECIFICATION SHEET NUMBER, AND DASH NUMBER FROM TABLE I. WHEN PARTS ARE MADE OF ALUMINUM, ADD NO LETTER AFTER THE DASH NUMBER. WHEN PARTS ARE MADE FROM STAINLESS STEEL, ADD AN S AFTER THE DASH NUMBER.




PART NUMBER EXAMPLE:

M81714/14-1

ALUMINUM FEEDTHRU TYPE RACK ASSEMBLY DASH NUMBER 1.

3. METRIC EQUIVALENTS (TO THE NEAREST .01 MM) ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM.

4. INTERNATIONAL INTEREST, SEE SPECIFICATION MIL-T-81714.